



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,870	08/18/2006	Michael A. Todd	124-1170	3802
23117	7590	03/17/2008	EXAMINER	
NIXON & VANDERHYE, PC			NGO, NGAN V	
901 NORTH GLEBE ROAD, 11TH FLOOR				
ARLINGTON, VA 22203			ART UNIT	PAPER NUMBER
			2818	
			MAIL DATE	DELIVERY MODE
			03/17/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/589,870	TODD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ngan Ngo	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 15 February 2008.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,2,4-8,11,16,18 and 19 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2,4-8,11,16,18 and 19 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>0806</u> .	6) <input type="checkbox"/> Other: _____ .

The amendment filed February 15, 2008 has been entered and made of record as paper no. 0208.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-8, 11, 16, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Tennant et al (US 5627112).

Tennant discloses a method for fabricating a micro-sensor device comprising the steps of: fabricating on a parent substrate (102) at least one sensor element (108), forming an interconnect layer having first and second surfaces remotely to the parent substrate so as to enclose the at least one sensor element between the first surface and the parent substrate, providing a plurality of electrical interconnections between the at least one sensor element and a plurality of terminations (120) at the second surface of the interconnect layer, said terminations adapted to interface with a readout substrate, providing a readout substrate having a plurality of input connections (126) disposed on a first surface thereof, said input connections arranged so as to substantially correspond with the terminations at the second surface of the interconnect layer,

interfacing the plurality of terminations with the corresponding input connections to form an integrated assembly, and removing the parent substrate from the integrated assembly within an area corresponding substantially with the at least one sensor element.

Claims 1, 2, 4-8, 11, 16, 18, and 19 are alternatively rejected under 35 U.S.C. 102(b) as being anticipated by Cole et al (US 6,287,940 B1, cited by Applicants).

Cole et al discloses a method for fabricating a micro-sensor device comprising the steps of: fabricating on a parent substrate (2) at least one sensor element (6 and 8), forming an interconnect layer having first and second surfaces remotely to the parent substrate so as to enclose the at least one sensor element between the first surface and the parent substrate, providing a plurality of electrical interconnections between the at least one sensor element and a plurality of terminations (44) at the second surface of the interconnect layer, said terminations adapted to interface with a readout substrate, providing a readout substrate having a plurality of input connections (27) disposed on a first surface thereof, said input connections arranged so as to substantially correspond with the terminations at the second surface of the interconnect layer, interfacing the plurality of terminations with the corresponding input connections to form an integrated assembly, and removing the parent substrate from the integrated assembly within an area corresponding substantially with the at least one sensor element.

Any inquiry concerning this communication should be directed to Examiner Ngan Ngo at telephone number (571) 272-1711. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ngan Ngo/

Primary Examiner, Art Unit 2818

Ngan Ngo  
March 20, 2008